Green Building Feebate

DESCRIPTION

The Green Building Feebate program would function as follows: a fee would be charged for all new construction based on the square footage of the building. A waiver would be obtained if the building meets certain green building standards. A reward would be granted for high performance buildings, the reward incrementally increasing according to the level of certifiable performance that the building achieves. The program would affect buildings over a predetermined size, for example: 5,000 sf for commercial, and over 1,200 sf for residential.

POLICY OBJECTIVE

The objective of the Green Building Feebate policy is to catalyze a widespread market shift to green building practices. As the policy is tied to green building practices, it can be used to create incentives for a wide range of building performance improvements, but most easily for standard quantifiable metrics such as energy performance.

SUMMARY RATINGS (★★★★★ = best/most feasible)

ENERGY EFFICIENCY POTENTIAL	★★★	COST EFFECTIVENESS	★★★
ECONOMIC BENEFIT	★★★	ADMINISTRATIVE FEASIBILITY	★★★
COST OF IMPLEMENTATION	★★★		

INDIVIDUAL CRITERIA RATINGS

ENERGY EFFICIENCY POTENTIAL ★★★

Long-term energy savings potential is high if the magnitude of the fee encourages adoption of energy efficient building practices.

- **Policy uptake is dependent on fee price point:** The policy example in Portland as not yet been implemented. Portland is assuming a base case of 75% pay fee / 20% fee waiver / 5% reward; while the optimal case shows: 30% pay fee / 50% fee waiver / 20% reward.
- **Cumulative energy savings of 150,000 to 300,000 MWhr through 2030:** Energy savings were calculated assuming an energy efficiency improvement of 30% for waivers and 45% for rewards (based on the Portland model) for the various policy adoption scenarios. Policy uptake will determine the energy savings potential of the policy – the baseline scenario of 25% adoption will result in the lower range of energy savings, and the high adoption scenario of 70% will maximize the energy savings. The critical piece of the policy design is with the price point and the level of performance required. The policy uptake will be affected by the Seattle's ability to define the appropriate fee/reward threshold.
- **Consistent with targets outlined in 2030 Challenge targets:** The policy is most effective when tied to a 3rd party certification such as LEED. This standard currently does not prescribe improvements in energy efficiency and carbon reductions to the level necessary to achieve the 2030 Challenge. It is necessary to add mandatory credits within the Energy and Atmosphere section of LEED-NC 2.2 to achieve required building energy performance (the 2 mandatory credits prescribed by LEED match Seattle's current Energy Code). Portland also prescribed a review process to update the policy every three years as the referenced standards and policies are upgraded. A similar periodic review will be critical for this policy to be successful in Seattle. The policy is still an incentive based program, which cannot compel developers to meet the chosen energy performance standards. However, setting the fee and reward at an appropriate level should stimulate developers to adopt more energy efficient construction. Therefore, monitoring of policy adoption over time will be key to assessing the policy's compatibility with a route map of energy performance improvements over time.

ECONOMIC IMPACTS ★★★

Potential for job creation and regional economic development is dependent on fee level and policy uptake.

- **Job creation potential dependent on policy uptake:** If the fee/reward is large enough, the feebate policy would promote a market-wide shift to green building design and construction strategies. This would likely generate new jobs in the following sectors: sustainability consultants (especially LEED certified professionals), green collar jobs in

materials and technology manufacturing, commissioning professionals, appraisal professionals, among others. The potential for this policy to generate new green collar jobs is dependent on the size of the fee and the market reaction to the standards.

- **High potential for policy to aid in regional economic development in long-term**: High to medium policy uptake (35-70% of new development receiving a waiver or reward) would catalyze the green building professional job market, resulting in new jobs for building permitting professionals, contractors, trade professionals, lenders, and appraisers.
- **In the short term, potential for project cost increases is high, which could stagnate real estate development market**: The fee level which would trigger incorporation of green building practices is variable across development type and developer. Even if the fee is appropriately set to reflect the difference between costs and benefits, it is inevitable that some projects will not elect to pursue the waiver/reward. If this phenomenon is widespread (adoption is low), then lease rates, rental rates, and sale prices may rise, potentially causing stagnation in the market. Therefore, the fee structure must be tightly aligned with the increase in development costs associated with high performance buildings.

COST OF IMPLEMENTATION ★★★

The policy development process could be quite costly, both in terms of time and money. However, once set up, this policy is expected to have moderate to low costs for the City, and will add only slightly to project costs for the developers looking to achieve the waiver level. The reward level may incur more costs depending on the approach of the developer.

- **Policy will require start-up costs, but will generate revenue for the City under most adoption scenarios:** In Portland, $500k has been assumed for technical assistance and administration for the fee. For Seattle, these program costs will be in the range of $750k, as the absolute projected growth of the City is larger than Portland's. The City will generate funds from those projects assigned a fee for non-compliance, in the range of $4.5-$6MM annually for the low adoption scenario and $600k-900k annually for the high adoption scenario (assuming an average $2.00/sf fee for commercial and $0.75/sf for residential). One key issue for Seattle to assess is the level of market adoption that particular fee rates could support, or rather, at what point is the City distributing more money in rewards than it is receiving in fees.
- **Fee will result in project cost increases for developer, though waiver and reward will offset incremental costs of development:** The intent of the policy is for the fee to equate to the incremental cost increase in green building (the difference between marginal cost and benefit of green building). For those projects that do not comply, the fees would represent a small, but noteworthy, percent of total project cost (<1-4%). An economic consulting group, ECONorthwest, performed an economic assessment for the City of Portland, which assumed that a 1% cost premium would be necessary for the waiver, and a 2-3% cost premium for the reward. These figures are a good estimate for Seattle.
- **Need for contextual business case:** The perception of developers is that this is a de facto mandate policy, which essentially requires compliance. To assuage concerns over additional project costs, it is suggested that Seattle develop a solid business case for green building in their regional context with well documented case studies of successful projects to convince those in the real estate community of its feasibility outside of government and large commercial buildings.

COST EFFECTIVENESS ★★★

Energy savings per program cost could be substantial if the policy is designed to send the correct price signal to developers.

- **Program cost per energy savings - $60-$110/MWhr:** Assuming a $2.00/sf average fee/reward for commercial buildings and $0.75/sf for residential buildings, cost effectiveness ranges from $60-$110/MWhr. This does not take into account the revenue generating capacity of the policy, which in all but the highest policy adoption scenario would generate a positive cash flow for the program. In the highest adoption scenario (70%), the cost effectiveness is approximately $10-$15/MWhr taking into account total program costs and revenues. As Portland has not implemented the green building feebate policy, there is no track record of possible policy adoption or the performance of their fee/reward design. The energy performance is directly correlated to the third party standards that the feebate uses. If the feebate policy is quite ambitious and requires that new developer adhere to a high level of LEED® certification, then the energy savings per program cost could be quite low compared to other incentive policies.

ADMINISTRATIVE FEASIBILITY ★★★

Administration of the policy would require resources from the City in order to educate and train not only the developers and homebuilders, but also appraisers, lenders, trade groups, and labor unions. City staff would also need to be trained to understand the technical requirements of the policy.

- **Some difficulties in initiating policy:** In the case of Portland, the policy required a good deal of consultation and negotiation in order to make the policy politically feasible. Thus, the policy development phase proved to be challenging, but it is hoped that this upfront effort will smooth way for a relatively conflict-free implementation.
- **Good program flexibility if tied to 3rd party certification:** The feebate policy can be designed to be adaptive to the changes in standards to which it is referring - LEED® and Earth Advantage. Consequently, the policy is tied to a 3-year review cycle to keep the policy updated to contemporary standards.
- **Significant educational outreach requirements:** An outreach program would be required to ensure the development community understood how the feebate was going to work, how it had been structured and what information would be required to ensure compliance. Some monitoring of the development process will be required to ensure that the required performance (e.g. in terms of LEED®) is achieved.
- **Policy could integrate well into existing permitting process, though additional training may be needed:** There are staff within DPD with the requisite skills to implement the policy, although some training on third party certification for the permitting staff may be required, specifically LEED® and Earth Advantage. It is not known if additional staff solely dedicated to this program will be needed, beyond a program coordinator. It is possible that the policy will add significantly to processing time, both for permitting and fee collection/reward distribution. If that is the case, then additional staff will be needed.
- **Possible legal challenges:** There are potential legal issues surrounding the implementation of this policy. One strategy that contending groups could employ are suits against the City for placing undue financial burden on them to comply with green building standards. Additionally, there are rules and restrictions on what the City is permitted to charge a fee for. If Seattle elected to pursue this policy, it would have to investigate the legal implications of a green building feebate.

STAKEHOLDER IMPACT

If the threshold levels are set to offset most additional costs, and sufficient advice provided to facilitate developers implementing higher performance buildings, the impact on the development community will not be too onerous. It would fit well within the current regulatory regime.

- **Potential small homebuilder community concern:** In Portland, the City found that initial outreach to residential developers and trade groups was necessary to develop understanding regarding the threshold targets for the feebate and its potential impact on their costs. Developers in the commercial and large retail markets were more supportive due to the already high prevalence of LEED® certified buildings in Portland.
- **Engagement with the real estate community:** Seattle should engage with business alliances and building owners associations to understand their perception and concerns about this type of policy. Additionally, it is recommended that the City develop a solid business case for green building in their regional context with well documented case studies of successful projects to convince those in the real estate community of its feasibility outside of government and large commercial buildings.
- **Potential impact on susceptible populations is moderate:** Impact will depend on what development is forthcoming where within Seattle. In Portland the majority of residential development is on the outskirts of the city in lower income neighborhoods. If developers are unwilling to incorporate green building practices in order to receive at minimum a waiver, there is the potential that developers would pass that cost onto the home purchaser, business, or lessee. This could place an additional financial burden on those families and business owners in these neighborhoods.
- **Synergy with current SCL and PSE policies:** The policy would certainly have some interaction with existing Seattle City Light and Puget Sound Energy policies. Traditionally, both utilities have been interested in promoting innovation in energy efficiency practices that go beyond current energy code. Likewise, the feebate is aimed at doing the same thing; it creates an incentive to innovate beyond code through wholesale measures that penalize or reward projects based on performance. It is likely that the programs would be complementary, though the issue of redundancy would have to be addressed in the policy design and implementation.

LESSONS LEARNED

- Early and regular stakeholder engagement and careful media management is important
- Keep it simple – developers do not want to have to work to obtain additional incentives
- Commercial market more open to green building practices than residential market
- Initial outreach to residential developers and trade groups recommended
- Additional resources, perhaps in the form of a database, for developers, contractors, realtors, and trade professionals would help them gain familiarity and comfort with green building practice
- Avoid use of 'carbon' due to political sensitivity – a broader green building package is more acceptable
- Tying the feebate to third party standards allows for trained professionals to facilitate the process of policy adoption
- Set targets to stretch markets and be affordable for the City